

Product datasheet for RN212337

Acmsd (NM_134372) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Acmsd (NM_134372) Rat Untagged Clone
Tag: Tag Free
Symbol: Acmsd
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN212337 representing NM_134372
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGAAAATTGACATCCACTCACATTCTACCAAAGGAATGGCCTGATCTAGAAAAGAGTTTGGCTATG
GAGGCTGGGTGCAGCTCCAACAGCAAGGCAAGGGAGAAGCAAAGATGATGAAAGACGGGAAGGTCTTCAG
AGTGATCCAACAGAAGTCTGGGACCCAGAAGTCCGCATCAGAGAAATGAACCAGAAAGGAGTGACAGTG
CAAGCTCTTCCACAGTTCCCGTCATGTTTAGTTACTGGGCCAAACCTAAGGACACTTTGGAAGTGTGCC
AGTTTTTAAACAATGACCTCGCTGCCACGGTGGCCAGATACCCTCGAAGGTTTGTGGGTTTGGGGACATT
GCCTATGCAAGCCCCGGGCTGGCTGTCGAGGAGATGGAGCGTTGTGTAAGGAGCTAGGATTTCCAGGA
ATCCAGATTGGATCCCACATCAACATGTGGGACCTGAATGACCCGGAAGTCTTCCCCATCTACACGGCGG
CTGAGAGGCTGAATTGTTCTCTGTTCTGTCATCCCTGGGATATGCAGATGGATGGACGGATGGCCAAATA
CTGGCTGCCTGGCTCGTAGGAATGCCATCGGAGACCACCACGGCCATTTGCTCCATGATCATGGGTGGG
GTGTTTCGAGAAGTTCCCAAACCAAAGTGTGTTTGCACATGGAGGTGGTGTCTTCCCCTTACCATAG
GAAGAATTGCTCATGGATTTAACATGCGCCAGATCTCTGTGCCCGGACAATTCATCTGACCCAGAAA
ATACCTTGGCTCCTTCTACACGGACTCCCTGGTTCATGATCCTCTGTCTCAAGCTATTGACAGATGTT
ATAGGGAAGGATAGAGTTATTCTGGGAAGTATTACCCCTTCCACTAGGTGAGCAGGAGCTGGGAAGT
TGATAGAGTCTATGGCAGACTTTGATGAAGAAACAAAGGATAAACTTACAGCTGGCAATGCCTTGACTTT
TTTGGTCTTGAGAGAAAACATTTGA**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_134372
Insert Size: 1011 bp



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OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_134372.1](#), [NP_599199.1](#)

RefSeq Size: 1011 bp

RefSeq ORF: 1011 bp

Locus ID: 171385

UniProt ID: [Q8R5M5](#)

Cytogenetics: 13q13

Gene Summary: Converts alpha-amino-beta-carboxymuconate-epsilon-semialdehyde (ACMS) to alpha-aminomuconate semialdehyde (AMS). ACMS can be converted non-enzymatically to quinolinate (QA), a key precursor of NAD, and a potent endogenous excitotoxin of neuronal cells which is implicated in the pathogenesis of various neurodegenerative disorders. In the presence of ACMSD, ACMS is converted to AMS, a benign catabolite. ACMSD ultimately controls the metabolic fate of tryptophan catabolism along the kynurenine pathway.[UniProtKB/Swiss-Prot Function]